

NOTES

A NEW *MATELEA* FROM PANAMA

Matelea as defined by Woodson (Ann. Missouri Bot. Gard. 28: 193–244. 1941) in his study of the North American Asclepiadaceae is the largest genus in the tribe Gonolobeae. Although ranging from the southern United States well into South America, the center of distribution of the genus appears to be the southern Mexico-Guatemala region with a possible secondary center in northern South America. There are, at present, eight species reported from Panama, although this number seems to increase with each new collecting trip. While most of the species occurring in Panama are found elsewhere in Central America, the more recently collected ones have definite South American affinities. The new taxon described here most resembles specimens in the herbarium at Missouri Botanical Garden which appear to represent two or three new taxa from South America. If indeed these are new, they will be described at a future date.

Matelea panamensis Spellman & Dwyer, sp. nov.—Fig. 1.

Folia elliptica integra, basi obtusa usque truncata, apice cuspidata. Inflorescentia extra-axillaris umbellata. Calyx extus hispidus intus glaber, lobis lanceolatis acutis. Corolla rotata, lobis late ovatis, apice brevi-cuspidatis, brunneis. Annulus faucis porcae angustae similis, ciliis albidis patulis ad 0.6 mm longis ornatus. Corona pallido-brunnea, lobis 5 altis annulo angusto conjunctis, eo columnam staminum adnato, lobis apice lato-reniformibus, ca. 1.5 mm latis et ca. 1.0 mm longis. Fructus anguste ovatus, 21 cm longus 9 cm latus, exocarpio in sicco lignoso crasso, endocarpio in sicco coriaceo crasso. Semina 1.5–1.7 cm longa et 0.8–1.1 cm lata, ala crassa lata proximale erosa, ca. 3.0–3.5 mm lata, coma 2–3 cm longa.

Vine, suffruticose, the stems hollow. Stems, petioles, and main veins of the leaves pubescent, the hairs of two types, short bulbous ones mostly less than 0.2 mm long overtopped by multicellular brown ones 3–5 mm long. *Leaves* elliptic, entire, obtuse to truncate at the base, cuspidate at the apex; margins ciliate, the hairs long and multicellular, the blades discolor, the upper surface with scattered multicellular hairs, the lower scabrous intercostally; petioles 5.5–6.0 cm long; lamina 12–15 cm long and 7.5–9.0 cm wide. *Inflorescence* extra-axillary, umbellate, pubescent as on the stems, several flowered; peduncle ca. 2.0 cm long; pedicels ca. 1.5 cm long. *Calyx* densely brown pubescent abaxially, glabrous adaxially, ca. 1.4 cm in diameter, the 5 lobes lanceolate, acute, 5–6 mm long and 2–2.5 mm wide, a single conical gland in each sinus. *Corolla* rotate, ca. 2.2 cm in diameter, the 5 lobes, broadly ovate and shortly cuspidate at the apex, ca. 8 mm long and 8 mm wide, purplish-brown, hairs on the adaxial surface short, inconspicuous, appressed, gray, most abundant on the basal half of the lobes, the abaxial pubescence of the same type as on the stems, the multi-cellular ones prominently disposed in a thin band at the base of the lobes. *Faucal annulus* a low thin ridge, ca. 0.1 mm high or less, with dense, white, spreading hairs to 0.6 mm long. *Corona* carnose, 5 lobed, the lobes connected by a narrow annulus which is accrescent to the staminal column, each broadly reniform lobe joined to the annulus by a thin stalk which is ca. 1.1 mm long by ca. 0.4 mm wide, the lobes themselves ca. 1.0 mm long and ca. 1.5 mm wide, their margins slightly crenate. *Gynostegium* ca. 2.0 mm high, the head $\pm$ pentagonal, ca. 2.5 mm in

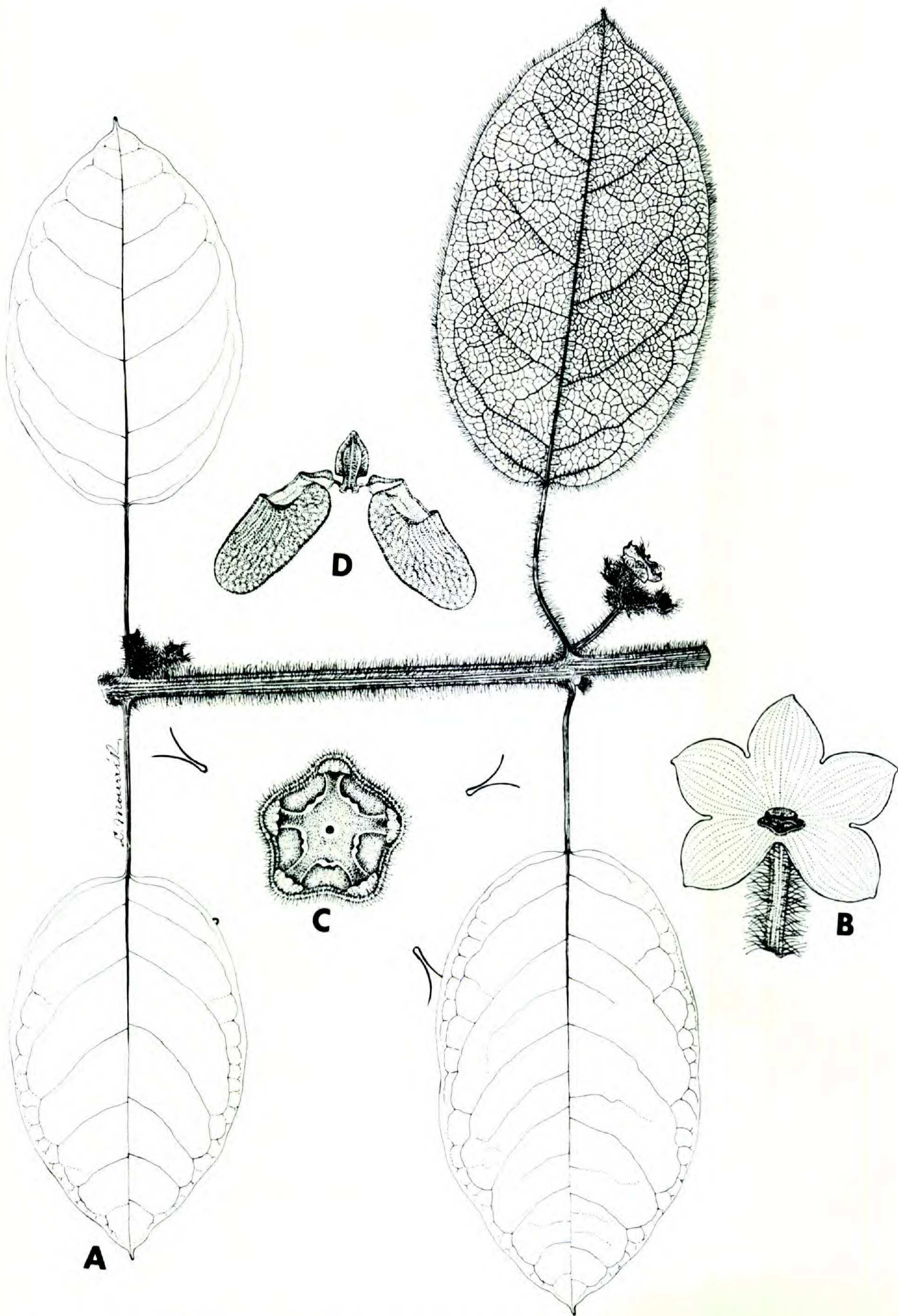


FIGURE 1. *Matelea panamensis* Spellman & Dwyer.—A. Flowering stem ($\times 0.4$).—B. Flower ($\times 1.1$).—C. Faucal annulus and corona ($\times 2.5$).—D. Pollinia ($\times 20$). [After Dwyer 8300 (MO, holotype).]

diameter, depressed in the center, covered by a thick membrane which becomes white in drying. *Pollinia* inserted horizontally, flattened truncate-elliptic, ca. 0.9 mm long exclusive of the translator, 0.4 mm wide. *Translators* ca. 0.3 mm long and half as wide. *Corpusculum* ca. 0.3 mm long and 0.2 mm wide. *Fruit* ovate, 21 cm long and 9 cm wide, with a broad, low dorsal ridge, the fruiting pedicel attached about 5 cm from the end, exocarp thick and woody when dry, the endocarp thick and leathery. *Seeds* 1.5–1.7 cm long and 0.8–1.1 cm wide, the wing thick and ca. 3.0–3.5 mm wide, erose proximally, the silky coma 2–3 cm long.

Holotype: PANAMA. COCLÉ PROVINCE: Cerro Pilon. 2500–3000 feet elevation, Dwyer 8300. (MO).

A quite distinctive species, *Matelea panamensis* has no close relatives among other taxa of Central America or Panama. It is readily distinguished by the long, dense, brown pubescence on the vegetative parts and calyx and by the dark brown rotate corolla.—David L. Spellman and John D. Dwyer, St. Louis University and Missouri Botanical Garden.

TRIBULUS CISTOIDES IN PANAMA

In my treatment of the family Zygophyllaceae for the *Flora of Panama* (Ann. Missouri Bot. Gard. 56: 177. 1969), the possibility of *Tribulus cistoides* L. occurring on the Isthmus was indicated. *Tribulus terrestris* L., a warm-temperate zone plant known only rarely from the tropics, had been collected once in the Canal Zone (Frijoles, railroad tracts, 20 May 1918, Killip 3445 in part (US)), while *T. cistoides*, native to tropical Africa, apparently had not. On a recent trip to the Herbarium of the New York Botanical Garden, however, I discovered a collection of *T. cistoides* from the Canal Zone (Between Mt. Hope and Santa Rita Trail, 25 Feb 1905, Cowell 90 (NY)). Both species are plants of dry disturbed habitats, and both Isthmian collections undoubtedly represent waifs that have failed to form persistent populations.—Duncan M. Porter, Department of Botany, National Museum of Natural History, Smithsonian Institution, Washington, D. C. 20560.

SEVEN NEW COMBINATIONS IN BAUHINIA

In the course of preparing a revision of the New World species of *Bauhinia*, it was ascertained that seven new combinations were needed to better align certain taxa. It is deemed better to publish these new combinations as a note at this time rather than wait until the revision is completed in approximately two years. Thus, the following new combinations in *Bauhinia* are proposed.

Bauhinia aculeata* subsp. *grandiflora (Juss.) Wunderlin, *stat. nov.* Basionym: *Bauhinia grandiflora* Juss. in Poir., Encyc. Suppl. 1: 600. 1811.

Bauhinia beguinotii* var. *gorgonae (Killip ex Cowan) Wunderlin, *stat. nov.* Basionym: *Bauhinia gorgonae* Killip ex Cowan, Bol. Soc. Venez. Ci. Nat. 22: 281. 1961.